

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-22 (canceled)

23. (new): A system for controlling functions in an animal processing facility having animal unit holders that travel along processing stations comprising

at least one sensor positioned at an input of a processing station for sensing the presence of an animal unit held by an animal unit holder and providing a corresponding animal unit sensing output, and

a control system having inputs and outputs for coordinating a function of the processing station in an automated, integrated manner using the animal unit sensing outputs as control system inputs and configured to deactivate the function of the processing station when the sensor detects and counts a predetermined number of animal unit holders that do not hold a corresponding animal unit.

24. (new): The system of claim 23, wherein the sensor senses the presence of an animal unit and a corresponding animal unit holder.

25. (new): The system of claim 23, wherein the sensor senses each of a series of animal holder units to determine whether a corresponding animal unit is held thereby.

26. (new): The system of claim 23, wherein the control system activates the function when the sensor detects a predetermined number of animal unit holders, each of which have a corresponding animal unit held thereby.

27. (new): The system of claim 23, wherein the function is water, gas, power, and/or equipment related.

28. (new): The system of claim 23, where the sensor is selected from the group consisting of infrared sensors, proximity sensors, proximity switches, metal detection sensors, ultrasonic sensors, and combinations thereof.

29. (new): The system of claim 23, wherein the control system adjusts processing station water usage based upon the animal unit outputs provided by the sensor.

30. (new): The system of claim 23, wherein the control system deactivates the function of the processing station based upon the total number of animal units in a given series and their location in the processing system.

31. (new): The system of claim 23, wherein the control system tracks the total number of

animal units in a series in order to determine when to deactivate a function of the processing station.

32. (new): A system for controlling functions in an animal processing facility having animal unit holders that can hold an animal unit and travel along processing stations comprising

at least one sensor selected from the group consisting of infrared sensors, proximity sensors, proximity switches, metal detection sensors, ultrasonic sensors, and combinations thereof and positioned at an input of a processing station for sensing the presence of an animal unit and animal unit holder and providing a corresponding animal unit sensing output, and wherein the sensor senses each of a series of animal holder units to determine whether a corresponding animal unit is held thereby; and

a control system having inputs and outputs for coordinating a function of the processing station in an automated, integrated manner using the animal unit sensing outputs as control system inputs and configured to activate a function of the processing station when the sensor detects a predetermined number of animal unit holders that have a corresponding animal unit held thereby and to deactivate the function when the sensor detects a predetermined number of animal unit holders that do not hold a corresponding animal unit.